



Let's Solve



A Larsen & Toubro
Group Company



A 7-Step Guide for Technology Investment in the New Reality



Over the last decade, IT has embarked on the journey of Agile way of working to become more adept in responding to changes. With the arrival of Covid-19, this ability to handle the changes due to the pandemic's 'New Normal' has been tried and tested. Today, although IT is playing a vital role in enabling post-pandemic business continuity, the biggest challenge for CXOs is about managing the new reality, where priorities will take a clear shift over the concerns of employee health & safety.

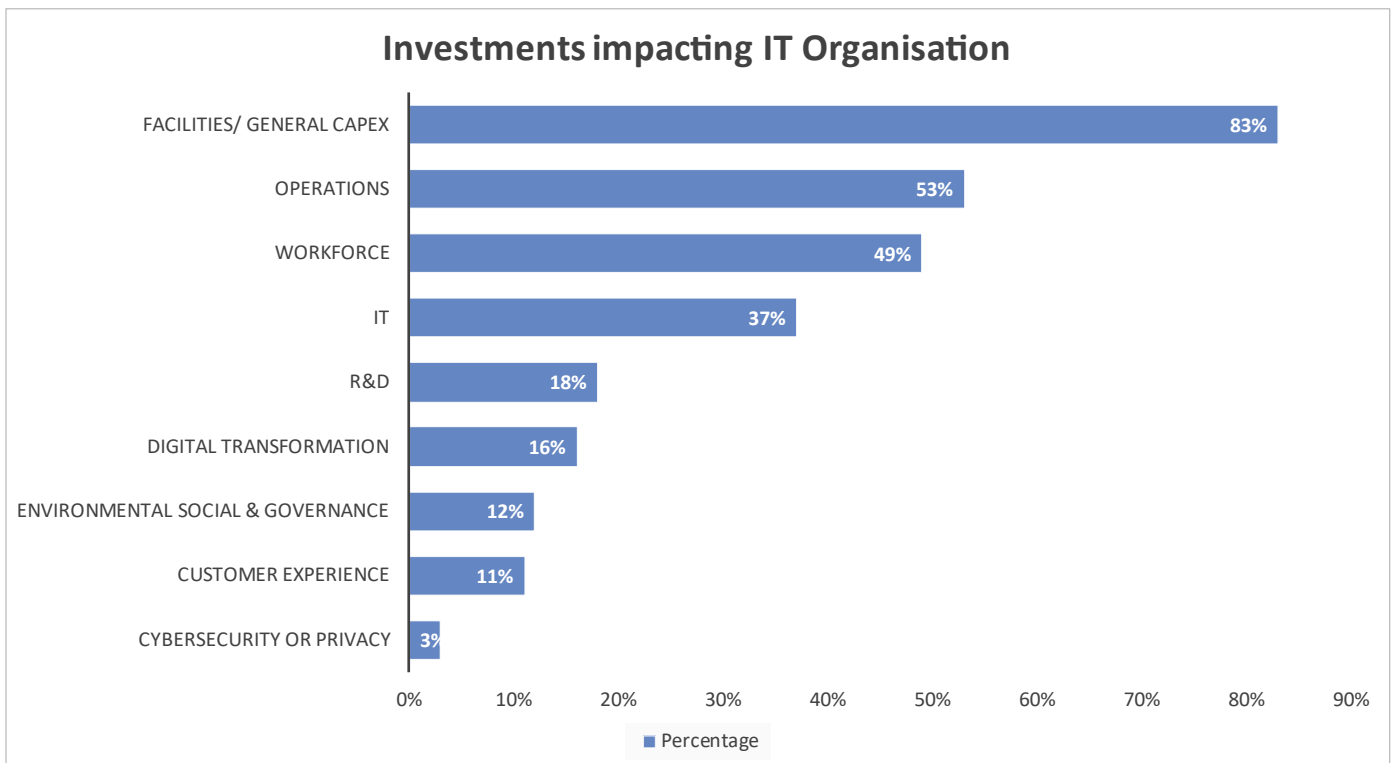
How the new reality is shaping up?

So far, CIOs have successfully implemented remote working in a record time to ensure business continuity. Gartner says 91% of organizations have enabled virtual workplace within few months, but with that comes the challenge to balance remote working with employee productivity. According to Gartner, "54% of HR leaders indicated that poor technology and/or infrastructure for remote working is the biggest barrier to effective remote working". Covid-19 has stressed the fact that "A company is only as strong as its weakest link". CIOs will soon have to make the workplace safe and ready to be used post Covid, along with sustained support for remote working. Remote work has lost its rosy hue and led to burning out of remote workers. Loss of creativity is becoming the threat for organization. There is ~10% drop in Patent Filing in 2020. Frankly, we are now realizing that employee experience brings customer experience (I would call 'business experience') & improvement needs to start from within the organization. A solution to bring 'satisfaction' is beyond CIO's purview - improving IT experience is foundational requirement, but this is much bigger and need participation from CEO, CFO, CHO, etc.



Now let's look from the end users' lens – are they receptive today for new promotions? No, they are more conservative and looking for authentic and meaningful support from business leaders. CTOs & CIOs now have the additional responsibility to empower business leaders with new-age solutions to provide traceability & transparency of data with self-service visualizations for data-driven decisions, seamless remote collaboration to efficiently transfer customers from offline to online channel.

Another twist, in a survey conducted by PWC shows that CFOs are planning to either cancel or defer below investments in upcoming months, and in some cases, even defer into the next fiscal year. So, CIOs & CTOs now have tighter liquidity to utilize.



How IT should respond to the new reality

In my view, IT should focus on being proactive in keeping the status quo, along with a very few key strategic initiatives for next few months till the dust settles down. What this translates into is that the CIOs must reduce operational cost & improve resilience in cybersecurity and privacy as immediate actions when we are recovering. At the same time, they should reserve liquidity for continuous innovation for business resilience – they are in an interesting spot where they need to balance survival, recovery & move fast towards rejuvenate.

CIOs & CTOs cannot see business strategy and technology strategy as two separate things rather what Covid has shown us is that any strategy they take, technology will be the key enabler. Now the question is, what are the new-age technologies to adopt and where to use them along with talent/cultural transformation to turn the 'new reality' into 'new opportunities'. Well, certain levers CIOs & CTOs must pull to attend the immediate need and accordingly distribute technology investment, sprint-wise. Not new to say, but this is of utmost importance that we don't select tools/ technologies by instinct, rather by data & facts and ensure to optimize technology landscape.

So, what should be the focus in next six months in terms of technology investment while we are recovering from the pandemic. Here are the three steps to focus on:

Improve resilience in cybersecurity & privacy

1

Technology levers to be leveraged - Endpoint security, PAM, DLP solution, encrypted connection / communication, multi-factor authentication, and session recording / audit solution.

Safeguarding the company's infrastructure, digital assets & data is a top priority in 'New Reality'. McAfee, Symantec, Microsoft & Google cloud DLP, Azure DLP, CoSoSys Endpoint Protector for clouds are known name in this field. CyberArk, BeyondTrust, Thycotic are market players as PAM solutions with recording the actions/activities of the users who access IT assets and apply AI in the data to predict the threats.

Reduce operation costs

2

Technology levers to be leveraged - Automation, AI, Cloud, Modern Data warehouse.

Well, Automation & AI we used to speak of even before pandemic as an accelerator for cost reduction; what is happening now is, I call it as , A2A shift, from 'Awareness' to 'Application'. With a focused approach, first modernize the IT assets (for example, Legacy to ERPs or migration from on-premise to cloud, set up modern data warehouse in cloud, and so on) and then apply automation & AI to eliminate/reduce toil. Why is this sequence preferable? This is to ensure your automation doesn't become invalid when you

modernize the landscape. Align automation roadmap with your transformation roadmap. Well, we need 'people' to apply the technology. So do we need a dedicated automation team in IT operations? Answer is, you need dedicated automation experts to start the momentum but also reskill your operation team with modern technologies, let them automate more and create their own bandwidth to do more innovation, self-fund the automation journey. That's where you realize real ROI from automation.

Focus on employee health and safety

3

Technology levers to be leveraged - EHS Platforms, GPS, Bluetooth Low Energy (BLE), sensors, AI & Analytics

Organizations should diligently decide different solutions to ensure employee's return to work is safe. Care for employee will bring care for customers and flourish the business.

- Employee wellness status check – QR code-based immunity passport (WeChat, Alipay) integrated with official Covid-19 test results (Onfido -UK & IDnow - Germany) , real-time AI-based video analytics enable thermal or infrared (IR) cameras at entry points of facilities to screen body temperatures and generate alerts when they



register high levels or detect no face mask adherence, EHSQ software auto-enroll workers into Similar Exposure Groups (SEGs) based on their potential risk of exposure, safety compliance check. Employees who are front liners and have higher probability to have contacts, should be equipped with smart PPE kits and wearable sensors to communicate to the control center to warn employees in case of excessive contacts in contaminant zones, and then follow the decontamination procedures.

- **Contactless ecosystem:** Self-service kiosk that uses touchless & vital sign detection technology (e.g. Elenium Automation) for contactless entry or touchless access to kitchen, bathroom & other common facilities. Implement automatic people-counting sensors to help maintain social distancing in the office, desk reservation systems to view current occupancy in real time map to book workspace (e.g Spaceti).
- **Cleaning & sanitation solutions:** Self-cleaning solutions (e.g. Nanoseptic) or light treatments (e.g. UV Angel) to clean surfaces (monitors, desktops, handles, etc). Install air filters , Far-UVC technology that utilizes a specific wavelength to neutralize

contaminants (e.g. Health), EHSQ software to automate the tracking and auditing of reoccurring cleaning and maintenance tasks.

Th next step is to gain the momentum of growth in the new reality. So what are the technology investments CIO & CTOs need to do for the strategic move?

Preventive & prescriptive it to improve resilience

4

Technology levers to be leveraged - AI, Data Analytics, Test Automation, Monitoring, Orchestrators.

3 stages:

- During product build, increase application observability by right logging & capturing data. Stress on application resilience testing (monkey testing) and chaos engineering to build resilient systems with lesser break points. focus on performance testing. (Tools - Load Ninja, JMeter, LoadRunner etc.), Usability Testing (Tools - Crazy Eggs, Optimizely etc.).
- Optimize monitoring policies to capture right metrics, correlate events/metrics with relevant alert rules. AppDynamics, Thousandeyes, ServiceNow Loom, Datadog, Splunk, SolarWinds are leading

the market, along with LTI's Canvas Operation platform catching up the game.

- Finally, leverage AiOps solutions to shift the needle towards proactive operations to predict the break and prescribe the solution proactively and immune the system by triggering workflows (via ITPA). ServiceNow ITOM, BigPanda, microfocus, ScienceLogic etc are key players. LTI's Canvas Operation Platform has become leader in this space as well.

Business transformation

5

Technology levers to be leveraged - AI, Data Analytics, Robotics, BPM, IoT, Blockchain.

While new business models are designed (Industry 4.0, Smart Factory), focus has to be kept on business process automation (e.g. UiPath, Automation Anywhere, Blue Prism etc), intelligent workflow automation, capturing relevant data & knowledge, apply analytics on top of it and list goes on. Interestingly 'A2A' shift is still slow for RPA, even though we started RPA journey more than a decade we still have organizations who are conservative in investing in RPA as technology.

Improve customer digital experience

6

Technology levers to be leveraged - AI, OCR, Analytics driven by UX best practices.

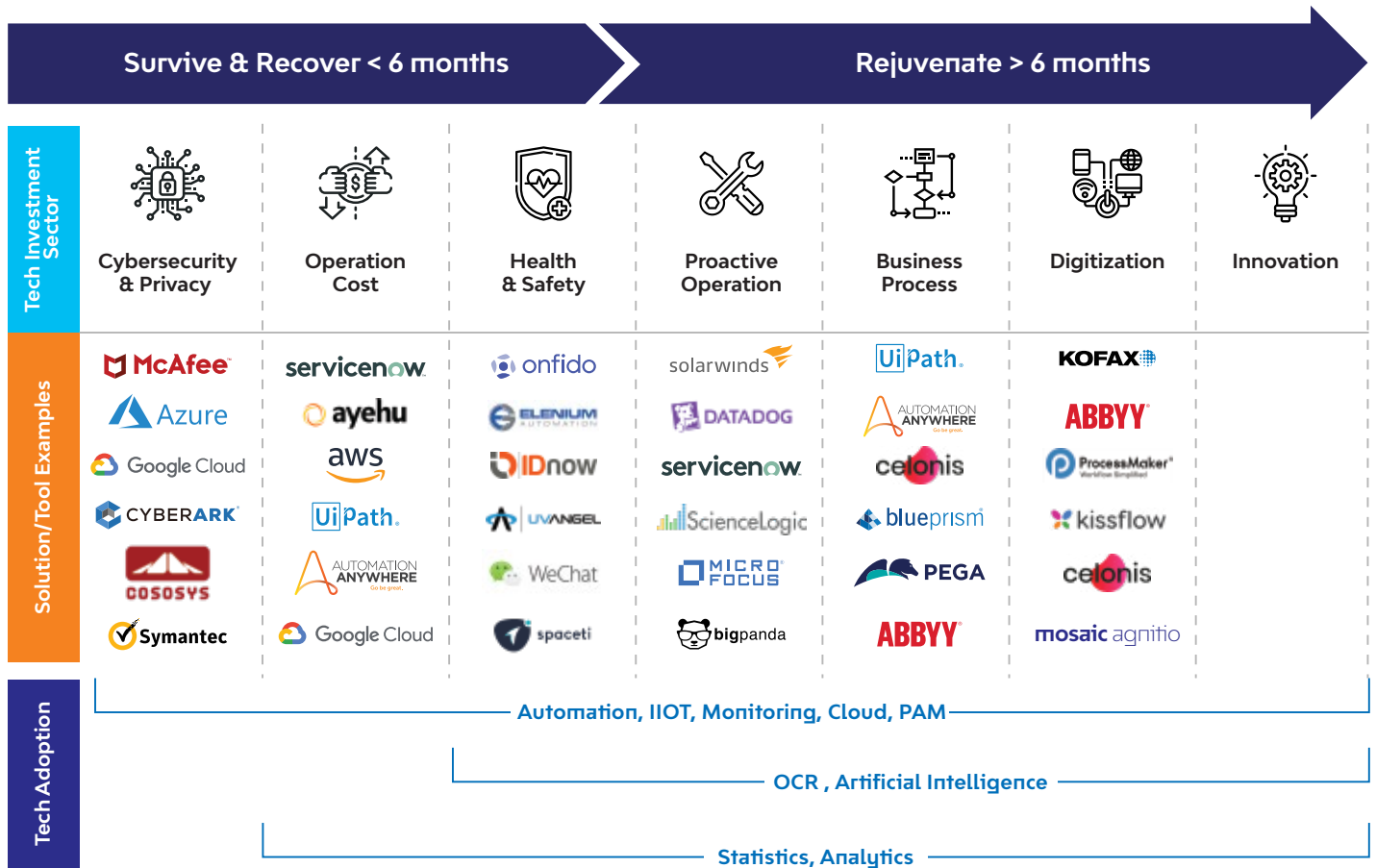
Shifting customer to online channels is mandatory, but to sustain the userbase and attract more customers, CIOs need to keep improving customer experience. Leveraging OCR, BPM, AI, analytics and different cloud based services for Video /image processing (Amazon Rekognition, Vision APIs) we must adopt more digitization, lesser manual intervention in the value chain, more visibility to customer, enable them to self-remediate.

Innovation & modernizing tech stack

7

Technology levers to be leveraged - AI, Analytics, Data science, Low-code programming, Quantum Computing & Other NextGen Technologies.

Organizations must remain focused in innovation to stay ahead of the curve, create more tools and get empowered by technologies to manage 'unforeseen'. Focus more on capturing right data and elicit the information from data. Invest in upskilling, crossskilling of employees



Concluding thoughts

Finally, when tools & technologies may contribute in making IT resilient, CXOs must redesign some of the key processes & practices. CIOs now should start defining pragmatic 'Service Level Objectives' & 'Error Budget' to define the right level of 'IT reliability'. This will ensure that we are not putting unnecessary effort and injecting new technologies in making an application 100% up when the business needs only 99% up-time. This 'saved' effort will be kept for innovation and engineering work and bring necessary elasticity to keep pace with fluid business needs, while we rejuvenate in new reality.

The suggested approaches in the paper, aided by tools & technologies, would help CIOs to keep listening the data, identifying the triggers to make pragmatic decision faster, shift from "Awareness to Application" and thus, help to manage post-Covid normalization and redefine their business models in the new reality.

Author Profile



Debashree Chatterjee

Associate Principal – Enterprise Architecture, LTI

Debashree is leading LTI's IT Automation Solution & Consulting Team. With more than 17 years of experience in the field of IT services with specialization in Automation both on IT & Business Process, Debashree is a technologist who works with global companies to identify automation opportunities and strategize automation solutions, help them constantly stay ahead of their competition.

LTI (NSE: LTI) is a global technology consulting and digital solutions company helping more than 400 clients succeed in a converging world. With operations in 31 countries, we go the extra mile for our clients and accelerate their digital transformation with LTI's Mosaic platform enabling their mobile, social, analytics, IoT and cloud journeys. Founded in 1997 as a subsidiary of Larsen & Toubro Limited, our unique heritage gives us unrivalled real-world expertise to solve the most complex challenges of enterprises across all industries. Each day, our team of more than 33,000 LTIites enable our clients to improve the effectiveness of their business and technology operations and deliver value to their customers, employees and shareholders. Find more at <http://www.Lntinfotech.com> or follow us at @LTI_Global.

info@Lntinfotech.com